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EDITOR'S ADDRESS.

In undertaking the duties of Editor of this long-established journal, the promises already received assure me of a continuance of the kind assistance which was so freely rendered to my predecessor by a large majority of the best zoological observers in the United Kingdom; and for my own part I shall strive to prove myself worthy of that support. It will, however, be readily understood that the success of 'The Zoologist' depends far more on its contributors than on the exertions of its Editor, and accordingly I venture to preface my labours by a few words which I trust may be acceptable to those on whose favour I shall have so largely to rely.

In the first place, it must always be remembered that Zoology is one of the most progressive of the sciences. Consequently many zoological observations which at the time they were made—say twenty years ago—were apt enough and of great value, have since become, by the natural growth of the study, of comparatively slight importance at the present day. Nor is there any appearance of a check in this growth. On the contrary, Zoology was never more rapidly advancing, and its votaries were never more active and numerous than now. The results no one can attempt to predict; but it is clearly the duty, as it must be the desire, of all zoologists and well-wishers to Zoology to aid this rapid advance. I would, therefore, with the utmost respect to my supporters, earnestly request them in every case to consider beforehand whether the contributions they may be intending to forward to this journal are such as will promote the progress of the study, and to satisfy themselves that this is so ere they despatch their communications.

It does not follow because a certain incident deserved publication once, that a similar incident is not worthy of record now. It is obvious that there are many occurrences which it is not only allowable but even highly desirable to communicate time after time, although beyond the mere occasional differences of place and date there may be little or no novelty in the notice.

Of such a kind are communications regarding the appearance of really uncommon species, or of common species at unusual seasons or in new localities. The use of these lies in their multitude, for it is only by collecting such records extending over a long period that any law may be deduced from them—a law which perhaps may bear upon some more general question: or the fact may be rendered apparent that the species is extending its geographical range. And it seems fitting that 'THE ZOOLOGIST,' which has always been the great storehouse of notices of this kind, should still maintain the same character. Hereby the progress of science may be unquestionably aided.

Then there is another matter, and one which I am well aware requires delicate handling on the part of an Editor. Yet it is so important that I cannot refrain from directing attention to it, and trust I may do so without giving offence to any. There exists amongst all contributors to Natural-History journals an unconscious but more or less strong tendency (sometimes most strongly shown in the best writers) to make the local and personal part of their communications of greater importance than it deserves.

To put a case which I never heard of happening, although it might well occur :—A man fishing, entomologizing, or botanizing along a stream encounters, one after another, a dozen Kingfishers; yet perhaps for days, weeks, or even months, he may have taken almost precisely the same walk, perhaps for the same purpose, without ever having seen more than a single bird of the species in one day, and that only at rare intervals. He will record the fact, and it is worth recording, but the probability is that in so doing he will rather dwell on its personality or local character—the circumstance that he, and he alone of mortals, was so favoured as to be the witness of such an unusual sight, and that his favourite stream was the scene; and he will be tempted to relate the happy accident which led him on that particular day to start with rod, net, or vasculum on that particular excursion. The cause or causes which induced the appearance of so unusual a number of Kingfishers will be most likely passed over altogether, although herein lies the sole importance of the communication. The observer's personality is of little or no interest to any one but himself: it is the bird or the number of birds observed under such circumstances that alone can have any zoological bearing.

In like manner, by too many naturalists, is the capture of a scarce insect or mollusk in a particular locality regarded rather as an instance of the lucky captor's prowess than as having reference to the appearance of the species. Still more forcible are these considerations when the species may be, after all, one that is not rare, and one that may be safely expected to show itself in the locality at the proper season.

There is some reason to suppose that the prevalence of notices of this kind (and I think no one can assert that past volumes of 'THE ZOOLOGIST' have been free from them) has been the means of deterring excellent observers from recording in this or other journals discoveries of considerable interest and importance. One such may perhaps be cited as having been brought to my knowledge by a friend. About ten years since an Annelid of very remarkable character—Dutrochet's Land-leach (*Trochetia subviridis*), of which only two examples had previously been observed in England, and those under circumstances which led to the suspicion of its being an introduced species *—was found to be abundant in a particular locality. The finder was urged to publish the fact in 'THE ZOOLOGIST,' as the most appropriate means of making it known to naturalists, but he could not be persuaded to do so, from the notion, ill-grounded as it might be, that notices therein printed generally had their origin in the personal vanity of the writers; and hence the details of this interesting discovery have never yet been fully given to the world. Many of the best field-naturalists shrink from giving their observations publicity, partly that they may not incur the shadow of a charge of personal vanity, and partly through an opinion of self-respect, which hinders them from placing their own discoveries on a level with those of men against whom such a charge could be not unfairly brought.

These remarks I venture to make now; it would be impossible for me to make them later, for they might be wrongly applied by some of my readers to communications that will have appeared in the meantime. At the outset of my editorial career, however, they may be taken not amiss.

In conclusion, I need only say that my best efforts shall be devoted to the advancement of the study which all zoologists have at heart, and, with the assistance of my contributors, I doubt not that that advancement will be real.

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* See Dr. Murie in the 'Proceedings of the Zoological Society,' 1865, pp. 659—662.

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ON THE EUROPEAN REDPOLLS.

By Alfred Newton, M.A., F.R.S., V.-P.Z.S., &c.

Having on two previous occasions expressed my opinion (Zool. 2nd ser. 2223, 3880) on some matters relating to the nomenclature and distribution of the European Redpolls, I think it only right to acquaint the readers of this journal with certain results at which I have arrived after several prolonged examinations, in consultation with my friend Mr. Dresser, of a very considerable series of specimens from various localities—the more so since on a few points, and these not altogether unimportant, my views have thereby been somewhat modified. I have now come to the conclusion that we must count *four* forms of Redpoll among the birds of Europe, three of which have been obtained in the British Islands.

1. There is the real *Fringilla linaria* of Linnæus. This is the Mealy Redpoll of English authors, and seems to have the widest range of all the forms. Specimens from this country (to which it is a not infrequent winter visitant), from Lapland, Northern Russia, Japan, California, Pennsylvania, and Greenland (to which last it is only a summer visitant), cannot by any means that I know be distinguished from one another. In Part 10 of the revised (4th) edition of Yarrell's 'British Birds' (ii. pp. 133—143), I have attempted a full account of its history, under the name of *Linota linaria*. Among its numerous synonyms are *Linota borealis* and, to some extent, *L. canescens*.

2. Considerably surpassing the foregoing in size, and distinguishable besides by its very hoary plumage and deeply-forked tail is the *Linota hornemanni* of Holböll. This is a resident in Greenland, whence, many years ago, Mr. Bond, I myself and others received its nests and eggs. It would appear from a specimen in Mr. Hancock's collection to be the form of Redpoll which occurs in Iceland. It is also the bird found breeding in Spitsbergen by Mr. Eaton (Zool. 2nd ser. 3805—3808), and, under the English name of Arctic Redpoll, Mr. Hancock has figured a specimen (B. Northumb. & Durh. pl. 5, p. 54) which was obtained at Whitburn, April 24, 1855. There are grounds for believing that it has strayed in winter to the north of France, and probably indeed it occurs, though in small numbers, every winter in Scandinavia and in the northern parts of the American continent. The kindness of

Mr. Gould fortunately enables me to declare that this form is not his *L. canescens*, as was asserted by Bonaparte and Prof. Schlegel, who have been followed in their mistake by most ornithological writers. A brief notice of this Redpoll is given in my new edition of Yarrell's work before named (ii. pp. 143—145).

3. Next there is a very interesting form, not until this year recognised as an inhabitant of the Old World. This is the bird described some fifteen years ago by Dr. Coues under the name of *Ægiothus exilipes* (Proc. Ac. Nat. Sc. Philad. 1861, p. 385). Our adventurous countrymen who have lately visited the northern parts of Russia, Messrs. Alston, Harvie Brown and Seebohm, have brought thence numerous specimens of it. In the depth of winter it is nearly as hoary as the last, but its small size enables it to be easily distinguished therefrom. I have seen examples from Lapland proper, but I cannot aver that it breeds there. From Archangel eastwards to the Petchora country it must be very common. Mr. Dresser has specimens obtained in Turkestan by Dr. Severzov, and we may guess that its range extends wholly across Siberia. At any rate it appears in that part of North America which is subject to the most severe climate, and it is as an Arctic-American species that Dr. Coues described it. Meanwhile we may speak of it as *Linota exilipes*. It has not, so far as I know, been obtained in these Islands: Mr. Dresser will no doubt do it justice in his valuable work.

4. Lastly we have the peculiarly British form of Redpoll. This, though commonly called by English and some foreign authors *Linota linaria*, is, as I have often said before, not the true *linaria* of Linnæus, and its earliest specific epithet is *rufescens*, assigned by Vieillot some sixty years since (Mem. R. Accad. Sc. Torino, xxiii. Sc. Fis. p. 202). To Temminck, the inveterate antagonist of the naturalist just named, is undoubtedly due the confusion which for so long a time surrounded this charming little pet of our childhood. According to all the information I have been able to obtain and sift, it would not appear to breed anywhere but in the British Islands, and, were it not that its roving disposition sends it to southern countries in winter, it would be as emphatically peculiar to our own land as is the Red Grouse. In point of size it fairly agrees with *L. exilipes*, but *L. rufescens* is never hoary and keeps from its youth upward that rufescent colouring which prompted Vieillot to give it the appellation by which it should be known.

In a former notice (Zool. 2nd ser. 2223) I said that I believed it had been observed in the extreme south of Sweden. I now think that I was misinformed on this point, and certain it is that this form of Redpoll has not yet been found to breed in Scandinavia. What else is known of its history I have done my best to trace in the account given in the revised edition of Yarrell's 'British Birds' (ii. pp. 146—152).

I will here abstain from any generalizations from the facts I have just stated, and will only call the attention of my readers to the remarkable results at which my lamented friend Mr. John Wolley arrived with regard to the curious seasonal growth of the bill in *L. linaria*, as observed by him more than twenty years ago, and recently set forth by me in my history of that bird above referred to. Their truth was confirmed by the instinctive deduction of the late Dr. Gloger, to whose happy knack of solving an ornithological difficulty I the more readily bear witness since it was once my fate to confront and refute him on another matter. I will, in conclusion, point out that Wolley's experience of Lapland and knowledge of its birds has of late frequently met with scant appreciation. I have found his testimony set at no higher rate than that of another Englishman who having lived ten years in Sweden knew not the confines of the country, and but once, and that but for a single summer, visited one district in Lapland.

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ON THE MIGRATION OF BIRDS ON THE N.E. COAST OF ENGLAND IN THE AUTUMN OF 1876.

By John Cordeaux.

The following notes, although not so complete as I could have wished them to be, refer more especially to the arrival of autumn migrants on that part of the north-east coast lying between the Spurn Point and the estuary of the Tees during the fall of 1876. For many of them I am indebted to the letters of correspondents, some of whom, although not perhaps practical ornithologists, have yet a very considerable knowledge of our common autumn visitants, a knowledge acquired under the peculiar circumstances of their life, which is a very watchful and observant one,—the guardianship and care of lighthouses overlooking the stormy waters of the great North Sea,—and rarely do we find a finer and more intelligent body of men than those employed in this important and trustful service.

It has long been a well-known fact that, during the period of the autumn migrations, large numbers of birds of various species immolate themselves by dashing, during the night time, when in full migratory swing, against the thick glasses which surround the lanterns of the various lighthouses on our shores, more particularly those situated on the eastern and southern coasts. I have known flocks of migrating Starlings settle in the night time on the top of a lighthouse, where they continued for a long time to keep up a continual chattering, astonished perhaps at the novelty of the situation. Numbers of small birds will often hover for hours to and fro in the blaze of light without striking the glass, like moths on a summer evening when the hall-door is open and the lamp lighted. Sometimes, too, on dark and misty nights flocks of Curlew and Whimbrel, like spirits of the lost, wail and scream round the solitary lamp-trimmer in his lonely pharos, or troops of Gray Plover and Dunlin whirl past in the blaze cast forth by highly-polished lenses—shape, size or colour as distinctly apparent in each individual bird as if seen by the light of noonday. It is a curious sight indeed for the lonely night-watcher to see the deluded little birds beating themselves to death against the polished pane, or to hear the *thump* as something heavier—Blackbird or Fieldfare—strikes and is hurled back smashed and senseless into the abyss. It seems easy enough for the spectator unaccustomed to the scene, bewildered and dazed by the blaze of light within the lamp-room, to slip and pitch headlong through the glass into the same black abyss which has just swallowed up the birds; but it is years now since I spent a night in a lighthouse, and the sensation of fancying oneself pitching backwards through the glass into the darkness requires some imagination to recall it.

Often have I wished that it were possible for a thoroughly practical ornithologist to be placed, for three months in the autumn, in each lighthouse and lightship; his work to consist of filling up, in a tabulated form, a record of birds striking the glass at night; the number of each species, sex and age, direction of flight, hour, state of weather and wind. These tables, taken collectively, would be deeply interesting, and perhaps throw light on some of the yet little-understood problems of migration.

It is rarely, if ever, that sea birds strike the glasses; they are perhaps too much accustomed to see the lights, and we find, as a rule, that they migrate far out at sea. Shore birds, again, do not so frequently come to grief as the true land birds; they are accustomed to the shore and the neighbourhood of lighthouses, and are also partly crepuscular in their habits. In nine out of ten cases it is the true land bird that suffers from these collisions—such as under normal circumstances go to roost at a reasonable and early hour, and are on the wing again at the first flush of dawn; they are unaccustomed to the darkness, more apt to be bewildered by late hours and the glare of lamps, and have little experience of night travelling, for the dark night migration takes place but once a year.

Eagle.—An Eagle, probably *Haliæetus albicilla*, was seen during the third week in November about the coast near Seaton Carew, Durham: it succeeded in avoiding the attentions of the numerous coast gunners, and finally took its leave after a few days' sojourn in the neighbourhood.

Osprey.—Mr. Richardson, of Beverley, informs me that he has received for preservation a male Osprey, apparently a bird of the second year. It was shot on the 23rd of November, at Cherry Burton, near Beverley. Mr. Adrian, of Lincoln, told me of another obtained this autumn in South Lincolnshire, but I neglected at the time to make a note of the date and locality.

Peregrine Falcon.—Mr. Bailey, of Flamborough, has recently seen three or four about the headland. Flamborough Head appears to be a very favourite locality for this species.

Short-eared Owl.—These birds arrived on the night of the 23rd October; at least, I first found them on the morning of the 24th, crouched amid patches of rough sea-grass on the embankment, as well as further inland on drain-sides and amidst rough grass in pastures. In the latter places they are comparatively safe. Unfortunately those alighting on the coast are almost invariably potted by the first loafer who at break of day, with rusty fowling-piece and villainous cur at heel, strolls along the sea embankment; for the poor soft-winged slow-flying Owl offers an easy mark, and will sit till nearly trodden upon. This autumn unprecedented numbers came, and I have heard of them in many localities on this coast. It is astonishing any are left to migrate, considering the number, year after year, wantonly and cruelly destroyed on their first arrival, as well as the many which figure afterwards amongst the "sundries" of the autumn and winter shootings. Mr. Lewis, the Principal of the Spurn Lighthouse, says he has never known them strike the glass like other birds, but during the period of migration they will fly round and round the lantern, apparently not incommoded by the blaze of light, and take off small birds that are fluttering and beating themselves to death against the glass. They arrived off Flamborough in flocks of from ten to twenty. The Principal has never known them strike the glass, but has twice observed them perched on the gallery rail on the outside of the lantern. North of Flamborough they appear to have been equally numerous along the coast. On a rock close to the Hartlepool Lighthouse a fisherman early one morning in October saw eleven or more sitting together. In a letter lately received from Heligoland, Mr. Gätke says:—"The Shorteared Owls pick off the poor birds when they are dazzled by the glare of the lighthouse, but not those fluttering against the glass; but Thrushes on the wing—constantly one hears their dying cries when clutched by the nude talons of an Owl that had just flitted, like a phantom, noiselessly past the light." A friend writing from the Durham coast (November 23rd) says, "During the last bad weather our shores were thickly visited by the Woodcock or Shorteared Owl; there have not been so many for some years."

Great Gray Shrike.—Mr. Boyes informs me by letter that he saw this bird at Spurn on the 23rd of October. Early in the morning of the 24th he saw another sitting on a hedge-top near Kilnsea: this he shot; it proved an immature male. Later in the day he saw another at Spurn, which seemed a fine old bird: Mr. Boyes shot this also, but did not recover it, as it managed to conceal itself amongst the long grass. Mr. Boyes mentions ten others shot a day or two previously to his visit. Mr. Lewis also shot one about the same time; but this bird also, like the one Mr. Boyes shot, succeeded in concealing itself in the long sea-grass. In 'The Field' for November 18th a bird of this species is recorded as shot at Sproatley, Holderness, during the first week in November. The Great Gray Shrike may be considered a very regular immigrant to our Holderness and North Lincolnshire coast at this season. In the Lincolnshire marshes it is common enough to have a local name, "Mutterer," a name I conclude given from its note, which, as I have heard it, resembles the knocking of two pebbles together.

Redwing.—I saw the first here on the 8th of November. Curiously enough, the only three birds killed against the Whitby High Lights in October, were two Redwings and a Lark.

Fieldfare.—I saw the first here on the 9th of November, two or three only; on the 15th many, but all birds of the year.

Blackbirds.—Came in, as usual, in large numbers, the bulk of them about the 16th and 17th of October, also up to the end of the month and in November.

Ring Ouzel.—These birds were seen at Spurn, as Mr. Lewis informs me, about the 16th and 17th of October, when the large body of Blackbirds came. I have usually met with them sparingly in these marshes, and in some autumns, at the time the other *Turdidæ* arrive, very rarely, however, coming across an adult bird—the majority are young of both sexes and females:* these are often difficult to distinguish amongst a hedgeful of Blackbirds, except by their grayer look and notes. Others, old birds, arrived at Spurn about the 28th of October—"old birds in full plumage," as Mr. Lewis says, "but not many." At the Flamborough Head Light, on the 30th of October, wind S.W., overcast, Starlings, Blackbirds, Ring Ouzels and Fieldfares came against the glasses. As a rule, the Starlings arrive a week before the *Turdidæ*. In Heligoland, Mr. Gätke says, "The Ring Ouzels came during the end of the month of October, which is four weeks too late for them here. There has been general disorder this year amongst the migrants." I have no notice of any Ring Ouzels north of Flamborough Head.

Golden-crested Wren.—I saw the first Goldcrests here on the 23rd of October. At Spurn they arrived about the 16th and 17th. At Flamborough, on October 20th, one pair of Golden-crested Wrens, male and female, accompanied by one Fire-crested Wren,† a male, struck the glass of the lighthouse between ten and eleven o'clock at night; weather very cold and much rain; wind S.E. At the Hartlepool Lighthouse the most frequent bird coming against the glass in October was this species; wind blowing fresh from the N.E. and S.E.; direction of flight always westerly.

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* Dr. Saxby ('Birds of Shetland,' p. 65) says, "In autumn we are generally visited by females, each accompanied by two or more young birds."

† I have not seen this bird: my informant, the Principal of the lighthouse, may have been mistaken. So-called Fire-crests captured on this coast I have invariably found to be old male Gold-crests. Professor Newton, in the new edition of Yarrell's 'British Birds' (vol. i., p. 459), points out the most obvious distinction between the two species: writing of the Fire-crested Wren, he says, "The black streak in which the eye is placed is the character by which this species can be more readily distinguished from the Golden-crested Wren."

Snow Bunting.—The only Snow Bunting I have seen so far in our marshes was on the 27th of November—a single bird coming across the river from the direction of Spurn. Others were seen in small parties at Spurn, November 16th; and a correspondent, writing from Flamborough (November 22nd), says a flock had been seen on the headland all the week, in company with Larks. Last autumn when the Snow Buntings arrived at Flamborough they were accompanied by Crossbills, a gale from the N.E. blowing at the time, and very cold weather. Just seven years previously my informant had seen Crossbills and Snow Buntings mixed together flying across Lundy Island, and shot examples of both. This was November 22nd or 23rd; sky overcast, wind westerly, and very warm. Mr. W. Lewis, writing from Spurn, says, "This morning (November 24th), in my watch from 3 A. M., there have been great numbers round the lantern; wind S., moderate. A few Gray Plover struck; also Dunlin, Blackbirds and Larks."

Woodcock.—There was a large flight of Woodcocks at Spurn on the morning of October 28th; wind N.E., light and misty. Unusual numbers appear to have landed on our N.E. coast about this date. Others came against the glasses of the Hartlepool Lighthouse, at the same time, and under the same circumstances, as the Golden-crested Wrens.

Snipe.—The first flight came on the night of October 24th; the main body, undoubtedly, during the severe weather of the 8th and 9th of November. On the latter morning I saw many small parties of two, three and six (but not exceeding the latter number), crossing the marshes from N.N.E. to S. and S.W. Saw the first Jack Snipe the same morning. Mr. Bailey, of Flamborough, had in October two Common Sandpipers killed against the glass of the lighthouse, and another which he calls Schinz's Sandpiper (?), also killed against the light. Perhaps we shall hear more of this last bird.

Swan.—On the 16th and 17th of October six were seen at Spurn; also a great many Ducks; wind S.E., moderate. Mr. Bailey, of Flamborough, says they have had numbers of Ducks along the coast.

Little Gull.—Two immature birds, now in the possession of a friend, were shot by Mr. Bailey off Flamborough Head in

September. A mature Glaucous Gull was seen, and an immature one shot. There were great numbers of Manx Shearwaters off the headland during August and September, and Mr. Bailey has seen one Great Shearwater.

As a sequel, I will give, from the other side of the North Sea, a page from Mr. Gätke's note-book, showing the migration of birds across Heligoland during the last fortnight in October, 1876.

"Oct. 1876.—16th, 17th, 18th, 19th. East, very strong. *C. Cornix,* thousands; *Sturnus,* hundreds; *Buteo,* many; *Lagopus,* some; *Musicus,* abundant. These passed the island night and day.

20th. East, very strong. *Cornix,* thousands; *Buteo, Lagopus, Nisus,* very many; *Sturnus,* a great many; *Cœlebs,* thousands; *Montifringilla,* a great many; *Musicus,* many; *Iliacus,* some; *Excubitor,* two; *P. major* and *cœruleus,* some; *Anthus cervinus,* one.

21st. East, very strong. *C. glandarius,* thousands passing the island, some landed caught—coming, never ending; *Cœlebs,* countless; *Montifringilla,* a great many; *Musicus,* many; *Iliacus,* less; *Major* and *Cœruleus,* some; *Nisus,* some.

22nd, 23rd. East, strong. *Glandarius,* a great many still; *Nisus,* some; *C. palumbus,* daily some; *A. alpestris,* many.

24th. *Phylloscopus* (?), seen in garden—rust-colour.

26th. W.S.W., calm. *S. rubecula,* thousands; *Rufa,* some; *Superciliosa,* one in my garden.

27th. W., calm.—28th (N.W.) and 29th (W.), little breeze. *T. torquatus* (!!!) and *iliacus,* some; *Anthus Richardi,* one; *Scolopax,* a few; *Accentor modularis,* still some; *Anas mollissima,* two fine old males shot on 27th.

30th and 31st. N.W., storm, hail and rain. *Scolopax rusticola,* 10—12; *T. pilaris,* a great many; *Strix flammea,* about 10—12 during the month; *Otus,* repeatedly; *Brachyotus,* a great many.

November, first week. Thousands of Geese, Ducks, and Swans."

Mr. Gätke, writing on the 20th of November, says:—"Immense flocks of Jays have recently passed this island, a species that numbers amongst the rarest of Heligoland; and another, still rarer, is just now shot here for the first time—viz., a *Magpie!* A friend, on hearing this, writes, 'One would think the knowing bird had heard its *Ornis* was at last going to be published, and had made its appearance accordingly, that it might not be left out!'"

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ON THE OCCURRENCE FOR THE FIRST TIME IN ENGLAND OF THE AMERICAN RED-BREASTED THRUSH (*TURDUS MIGRATORIUS*).

By the Editor.

It is not a little remarkable that most of the specimens of North American birds which are recorded to have been found in Europe were taken in England. According to Professor Spencer Baird this has happened in fifty out of sixty-nine instances, and in nearly every case these specimens belonged to species which are abundant during summer in New England and the Eastern Provinces of British America. This computation, however, was made ten years ago,* since which time the increased attention paid to Ornithology has resulted in the detection in Great Britain of several North American birds which had not been previously observed here, as well as many fresh instances of the appearance of species which had been already noted as occasional visitants to this country.

On referring to my 'Handbook of British Birds' (Introd. pp. x., xi.), I find that I had noted at the date of its publication, in 1872, the reported occurrence in the British Islands of 212 North American birds belonging to 42 different species. Omitting a few of these which have proved to be of doubtful authenticity, but adding some that I had overlooked, and a few others that have since occurred, we have in round numbers about 220 instances of the occasional appearance in Great Britain of North American birds. Of the forty-two species above referred to, five have been birds of prey, fourteen *Passeres* and *Picariæ*, one *Columba*, fourteen *Grallatores*, and eight *Natatores*.

I have now to add another to the list of passerine birds, in the shape of the American Migratory Thrush (*Turdus migratorius*), familiarly known as the American Robin.

In the month of September last I received a letter from Lieut. Charles Pope, of the 24th Regt., then stationed at Dover, in which he informed me that a friend of his had in his possession, alive, a remarkably coloured Thrush which he was unable to identify. It had been observed to fly in from the sea in a very exhausted state on a wet windy day during the previous month of April (or May, he was not sure which), and perching upon the first resting-place which presented itself, the balcony of a house facing the sea at Dover, had suffered itself to be frightened in through an open window and eventually caught. It lived in a small wicker-cage from April until September, when I first heard of it, and although the plumage became much soiled by confinement, it remained in good health.

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* See "The Distribution and Migrations of North American Birds," by Spencer F. Baird, in the 'American Journal of Science and Arts' (vol. xli., January, March, and May, 1866). Reprinted in 'The Ibis,' 1867, pp. 257—293.

From a description and sketch which Lieut. Pope forwarded, I had no doubt from the first that the bird was the North American Red-breasted Thrush, but it was not until two months later that I was enabled to pronounce with certainty upon the species. Being unable to refer to any of the works on American Ornithology to which I had referred him, Lieut. Pope prevailed upon his friend to forward the bird to me in London, and I duly received it on the 6th November last. My surmise was correct: it was undoubtedly *Turdus migratorius*.

With the Secretary's permission, I at once placed it in the Western Aviary in the Zoological Society's Gardens, where it may still be seen in good health, and in much improved plumage.

Now, how did this bird get to Dover? On my mentioning the circumstances of its capture to Mr. A. D. Bartlett, whose long experience as Superintendent of the Zoological Society's Gardens gives weight to his opinion in such matters, he was inclined to believe that it had escaped from some homeward-bound vessel in the Channel, and had made for the nearest land; a view which he thought was strengthened by the fact that the bird when he received it was very tame.

In this I do not quite concur, for I imagine that most homeward-bound vessels from New York return to Liverpool, and not *viâ* Dover; while the bird's tameness is easily accounted for by the fact that when Mr. Bartlett received it into his care it had already been in captivity for about six months. I am thus disposed to regard this as a genuine case of involuntary immigration.

Many such cases are already on record, and although this particular species is not known with certainty to have occurred here before, it has been met with on more than one occasion on the European continent, and, from its migratory habits, is just one of those birds which one would naturally expect now and then to arrive.

To account for the appearance of North American birds in this country is not so easy. I was at one time inclined to believe that the majority of them must find their way here from Greenland *viâ* Iceland,* but the investigations of Professor Spencer Baird have led me to alter this opinion, and to concur for the present in his own view that their appearance here is due principally, if not entirely, to the agency of the winds at the period of their migrations. Prof. Baird's remarks on this subject are so extremely interesting and at the same time so instructive, that they may be here appropriately quoted. After some pertinent observations on zoological geography and the general principles of distribution to which he has been led by an examination of the large collection of specimens in the Museum of the Smithsonian Institution, he proceeds to deal in detail with the migration of North American birds, and referring to the species which are reported to have occurred in England, he says:—

> "Birds of North America rarely, if ever, reach England from Greenland by direct spontaneous migration by way of Iceland, as shown by the fact that only three of the American birds occurring in Greenland are found in Iceland, and that few of the American species observed in Europe are found in Greenland at all. Most specimens of American birds recorded as found in Europe were taken in England (about fifty out of sixty-nine), some of them in Heligoland, very few on the Continent (land-birds in only five instances). In nearly all cases these specimens belonged to species abundant during summer in New England and the Eastern Provinces of British America. In a great majority of cases the occurrence of American birds in England, Heligoland, and the Bermudas has been in the autumnal months. The clue to these peculiarities attending the interchange of species of the two continents will be found in the study of the laws of the winds of the northern hemisphere, as developed by Prof. Henry and Prof. Coffin. These gentlemen have shown that 'the resultant motion of the surface atmosphere, between latitudes 32° and 58° in North America, is from the west, the belt being twenty degrees wide, and its greatest intensity in the latitude of 45°. This, however, must oscillate north and south at different seasons of the year with the varying declination of the sun. South of this belt, in Georgia, Louisiana, &c., the country is influenced, at certain seasons of the year, by the north-east trade winds, and north of the same belt by the polar winds, which, on account of the rotation of the earth, tend to take a direction

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* In support of this view, it may be observed that out of the forty-two species of North American birds which are stated to have occurred in this country, sixteen, on the authority of Professor Reinhardt, have been found in Greenland.

toward the west. It must be recollected that the westerly direction of the belt here spoken of is principally the resultant of the south-westerly and north-westerly winds alternately predominating during the year.'*

"From these considerations and facts, therefore, we are entitled to conclude that the transfer of American birds to Europe, is principally, if not entirely, by the agency of the winds, in seizing them during the period of their migration (the autumnal especially), when they follow the coast, or cross its curves, often at a considerable distance from land, or a great height above it. Carried off, away out to sea, mainly from about the latitude of 45° (the line of greatest intensity of the winds), the first land they can make is that of England, whence the fact that most of the species have occurred in the British Islands as well as Heligoland, equally well fitted to attract stragglers and furnish them a resting-place."

In view of these observations from so competent an authority, it is not unlikely that the bird which forms the subject of this notice may have found its way to this country without the agency of man, and if this be so it deserves to be placed in the annually increasing catalogue of "Rarer British Birds."

OCCASIONAL NOTES.

AUTUMNAL BREEDING OF THE OTTER.—On the 5th of December I happened to be in Mr. Vingoe's laboratory, where I saw a young Otter, about the size of a Fitch, or Polecat, which had been brought in from an adjacent valley, where it was seen and knocked on the head. I was not aware that the Otter bred in the autumnal months, as well as in the spring, when we know they do breed.—EDWARD HEARLE RODD (Penzance).

[The time of breeding with the Otter seems to be quite uncertain, young ones being found at very different seasons of the year. Mr. Bell, in the 2nd edition of his 'British Quadrupeds,' p. 176, says, "The female goes with young nine weeks, and produces from three to five young ones in March or April." The Rev. Leonard Jenyns says (Brit. Vert. An. p. 13) it breeds in March. Mr. Harris, of Moorswater, Liskeard, Cornwall, informed us some time since that he had taken young on the 3rd of April, "not much larger than mice, but covered with hair, and able to swim." Isaac Walton, who, from being constantly on the river, ought to have known something about Otters, speaks of discovering a female Otter, with five young ones, in May ('Complete Angler,' Major's 4th edition, p. 50).

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* See Prof. Henry's articles on Meteorology, 'Report of Commissioner of Patents for 1856,' p. 489.

A pair which were formerly in the Zoological Society's Gardens, bred in August (see 'Zoologist,' p. 1901). Three young ones taken in Norfolk in January were about six or eight weeks old, and therefore born in November ('Zoologist,' 1851, p. 3022). A well-known sportsman and naturalist, the late Mr. Lloyd, of Scandinavian renown, informed us that in Sweden the Otter pairs in February or March, according to the mildness or severity of the season. The latest contribution that we have seen to the natural history of the Otter, and a very instructive article withal, is from the pen of Mr. Thomas Southwell, of Norwich, and may be found in the 'Transactions of the Norfolk and Norwich Naturalists' Society,' 1872—73 pp. 79—90. On page 84 a tabular statement is given, showing the various periods of the year in which, in fourteen instances within the writer's knowledge, young Otters have been found in Norfolk. The result of Mr. Southwell's experience is that the Otter produces her young ones from December to February, is not double-brooded, and that the number of young is from one to three, rarely exceeding the latter.—Ed.]

Rabbits Breeding above Ground.—In the last edition of 'Bell's British Quadrupeds' it is stated (p. 344) that "on moors where the soil is very wet, Rabbits often refrain from burrowing, and content themselves with runs and galleries formed in the long and matted heather and herbage." An instance has recently come under my notice in which a Rabbit was found breeding above ground in a field of turnips, and in a flat form, like that of a hare. The form contained four newly born young, and before they were discovered the old doe was unfortunately shot. This was near Amesbury, in Wiltshire, and the circumstance was reported by an eye-witness, Mr. W. Southam, in 'The Field' of the 2nd December last.—J. E. Harting.

Occurrence of a South American Rail in Wiltshire.—On the 20th of October last I received a communication from my friend the Rev. Arthur Morres, vicar of Britford, near Salisbury (an ardent and an accurate ornithologist, on whose judgment I knew I could rely), giving me particulars of a strange bird (which he had seen in the flesh in the shop of Mr. Foot, birdstuffer, at Bath, on the previous Tuesday) which he could not identify, and upon which he asked my opinion: at the same time he enclosed a small feather, to show the prevailing colour of the plumage. It had been shot on the western borders of the county, between Trowbridge and Bradford, and had been taken to Mr. Foot for preservation on Saturday, October 14th. From the description given it was evidently a Rail, very like a Moorhen in shape, and was generally of a bright chestnut colour, with crimson legs. It measured fifteen inches and a half in length, and the beak from tip to gape was two inches. But I cannot do better than quote Mr. Morres' own description, of the excellence of which Professor Newton subsequently expressed his unqualified approval:—"Legs and irides bright crimson lake; beak light green, yellowish at the base; it had no naked patch or shield on the forehead (possibly from its immature age); head and neck, gray; back, light olive-green; tail and tail-coverts, black; breast, bright chestnut-brown; wings, bright brown, especially the quills, which had almost a crimson tinge to them; wings, underneath, barred with black and rufous-brown (one of these feathers was enclosed); thighs, gray; vent, &c., black." Being utterly at a loss to name the bird in question, and feeling very certain that it was no European species, I sent Mr. Morres' note and the single feather to my friend Professor Newton; and here I beg to hail, as a triumph of practical Ornithology, the fact that no sooner did Mr. Salvin, who examined it with Professor Newton, see the feather and hear the description, than he at once pronounced the bird in question to be the American species, known as *Aramides Cayennensis*; a judgment which the two able ornithologists above named immediately verified by comparison with other specimens in the Swainson collection at Cambridge. Professor Newton adds that "as its name implies, the bird is an inhabitant of Cayenne and adjoining parts, occurring in Trinidad, but nowhere nearer (he thinks) to this country. It has been brought over several times to the Zoological Gardens, but it is most improbable that it should find its way to England unassisted; though, supposing it had made good its escape from confinement, it might perhaps continue to exist for some weeks, or even months, here, except in winter. *Aramides* is a rather aberrant genus of Rails, found only in the New World." Doubtless Mr. Morres and I should have been better pleased if we could have honestly considered our Wiltshire visitor as "veritable British," but after this decided opinion of Professor Newton we shall scarcely be disposed to regard the stranger as a voluntary visitor, or as one of the numerous stragglers driven over by adverse winds; we must rather look upon it as an escaped prisoner, perhaps one which has freed itself from captivity for some time, and has been wandering on and skulking from observation, after the manner of other two-legged creatures when they have managed to get outside the prison bars. I am bound, however, to say that Mr. Morres, who has made enquiry in the neighbourhood, can hear of no such escape, and says there are no marks of captivity about the bird. I may also remark that it is so far a cosmopolite as to have bred in the Jardin d'Acclimatation at Paris ('Ibis,' 3rd Series, vol. i., p. 435), and I may remind Professor Newton that in the second series of the 'Ibis,' of which he was the talented editor (vol. iv., p. 486), he speaks of this very species as "the wide ranging *Aramides Cayannensis*."—ALFRED C. SMITH (Yatesbury Rectory, Calne).

GREENFINCH NESTING IN FURZE (Zool. 2nd ser. 5120).—In the summer of 1875 I found several nests of the Greenfinch in some tall furze bushes situated outside the wall of a kitchen garden, and one nest—containing four young ones—was almost entirely constructed of the silky catkins of the sallow, which the parent birds must have brought from some considerable distance, as no sallows are growing near the spot. The materials of which this nest was composed made it very conspicuous, and, what is more remarkable, the bird must have built it at a time when workmen were erecting an orchard house within a few yards of the bush; but we well know that birds as a rule are much tamer, so to speak, during nidification, than they are at any other time. I may remark that although these nests were built in the furze *outside* the garden, yet a much larger number were to be found *within* its boundaries, and these were constructed in almost any suitable place. The furze dwellers had possibly found the locality favourable for food, but not wishing, or not being allowed, to inconvenience their neighbours by building in their midst, they had availed themselves of the nearest suitable situation. I have never found a Greenfinch's nest in the furze upon the open heath, as I have those of the Linnet, and think the Greenfinch generally chooses a higher situation for its nest than the Linnet. As I had frequent opportunities of observing the Greenfinches in question, I may throw some little light upon "the time of day at which birds lay their eggs" (Zool. 2nd ser. 5115, 5161), and I can quite believe that the late Dr. Saxby intended writing A.M. and not P.M. These greenfinches always laid, as far as I was able to observe, in the morning, between 7 and 12 o'clock, generally from 8 to 10. When a boy at school I well recollect finding the nest of a Goldfinch in a high hedge: it had previously been found by some of my school-mates, and each was anxious to obtain the first egg. Two or three consecutive mornings I rose soon after daybreak, in anticipation of becoming the possessor of the much-coveted prize, ignorantly supposing that the bird laid during the night, or at very early morning. On the fourth morning an egg was laid between eight and nine o'clock, after I had waited some four or five hours for its appearance; I took this egg, and on the following morning the bird laid another about the same time, but she forsook the nest after the second egg was taken. One evening, in my rambles about the meadows, I came across the nest of a Reed Bunting containing two eggs; the following morning, having to pass near the nest, and seeing a Cuckoo fly out somewhere near the spot, curiosity led me to look at the nest again, and I found that besides the two eggs of the previous evening, one of the Cuckoo's was therein. This was before ten o'clock, so I reasonably conjecture that the Cuckoo must have laid that morning.—G. B. CORBIN (Ringwood, Hants).

GREGARIOUS HABITS OF THE LONGEARED OWL.—I may add my mite to the observations of Messrs. Boyes and Gurney upon this subject (Zool. 2nd ser. 5163) as follows:—A few seasons ago, during March, I visited the heaths in this neighbourhood for the capture of the moth called *Pachycnemia hippocastanaria*, and in a fir-wood through which I passed I had seen one or more of the Owls in question on several occasions. One evening in particular I recollect seeing five or six, and these flew in a moth-like fashion out upon the heath and back again to the fir-trees, keeping in a body, and often uttering a short sharp chirp or whistle, something after the fashion of the Nightjar. I laid quietly behind a bank and watched their movements, and as their excursions were made in a westerly direction—between myself and the fast-retiring sun—I could see them very plainly skimming about, sometimes just over the heather, then settling down, or chasing each other as if in play, after which they would return to the wood and settle on some low fir branch near to me, so that I could almost reach them with my hand. It seemed to me that they were birds belonging to the same nest, as they appeared uncommonly tame, but I had not heard that any Owl had nested in the wood where these frequented. Strange to say I have seen the Shorteared Owl but twice in this neighbourhood, while the longeared species is much oftener observed. It may often be seen during the winter months gibbeted in the "gamekeepers' museum," for it must be understood that here, as in most other places, all Owls are classed as "vermin," and pay the penalty accordingly.—G. B. CORBIN.

ROOKS ATTACKING ACORNS.—Whilst spending a few weeks in West Sussex during the past autumn, I was much amused in watching the way in which the Rooks carried off the acorns from an oak in front of our windows. Not content with picking up those which had fallen upon the grass below, they alighted upon the extremity of the branches, and plucking off the growing ones, carried them away to a little distance, and attacked them at leisure. I remarked that they did not swallow them whole, as Wood Pigeons do, but pecked them to pieces on the ground. Whether they swallowed the fragments, or only broke them to get at a grub within, I could not ascertain without shooting some of them, which I was loth to do; but I am inclined to think that a worm was the attraction, for after the birds had decamped I picked up handfuls of damaged and broken acorns, many of them only slightly chipped, which I should hardly have found if the birds had been feeding on them. This habit does not seem to have been noticed by the authorities on British birds, and I have looked in vain for any mention of it in the pages of Bewick, Montagu, Selby, Macgillivray, and Yarrell. It is true that Macgillivray includes acorns amongst the food of the Rook, but mentions them in such a way as rather to suggest that it is the fallen acorns which are picked up. In Jesse's 'Gleanings,' however (1st series, p. 61), I find the following statement:—"Rooks are known to bury acorns, and I believe walnuts also, as I have observed them taking ripe walnuts from a tree and returning to it before they could have had time to break them and eat the contents. Indeed, when we consider how hard the shell of a walnut is, it is not easy to guess how the Rook contrives to break it. May they not, by first burying them, soften the shell, and afterwards return to feed upon them?" It is a little curious that

Yarrell, who has given an extract from the very next page of this volume of the 'Gleanings,' should have omitted to notice this particular passage. Since writing this note I have received a confirmatory account from Mr. John Tyacke, of Constantine, Cornwall, who writes, "For the last two years I have noticed what I never saw before, *i. e.*, that the Rooks pitch in great numbers on the oak trees, and feed on the acorns, and I have been informed by a friend that they do the same on the Ilex." With regard to walnuts, I may add that in Sussex we have two walnut trees close to the house, and in the autumn, before the pods get too hard, the Rooks come early in the morning and steal quantities of them.—J. E. HARTING.

THE HAWFINCH (*Coccothraustes vulgaris*) IN SCOTLAND.—I wish to correct as soon as possible a somewhat grave error made by me in the last part (10) of the revised edition of Yarrell's 'British Birds,' and in so doing I have to thank a correspondent, before unknown to me, who has been kind enough to call my attention thereto. In the account of the distribution of the Hawfinch in Scotland (*op. cit.* vol. ii., p. 102, line 4) after the words, "according to Mr. Gray," the sentence should run "from Dumfreisshire to East Lothian, and thence to Perthshire," &c., and the foot-note at the bottom should be omitted. I shall endeavour to issue, with the next part of the work, a leaf that can be substituted for that which at present contains the mis-statements I desire now to rectify.—ALFRED NEWTON (Magdalene College, Cambridge, December 2, 1876).

ON THE OCCURRENCE AT MALTA OF THE SNOW BUNTING (*Plectrophanes nivalis*).—In what I said (Yarrell, Brit. Birds, Ed. 4, ii., p. 8) as to the supposed appearance of the Snow Bunting at Malta in 1840, I am still, I believe, so far correct; but Captain Feilden has kindly pointed out to me that I overlooked an undoubted instance of the occurrence of this species in that island recorded ('Ibis,' 1870, p. 490) by Mr. C. A. Wright, who shot a male bird there November 13th, 1869.—ID.

VARIETIES OF STARLING AND BLACKBIRD.—In 'The Zoologist' for October (2nd ser. 5120) a white Starling is recorded, and this is followed by an editorial note to the effect that this species "appears to be more subject to albinism than most birds." I have known three or four such examples to have been obtained in this part of Hampshire during my ornithological experience, although I have never had the good fortune to meet with one myself. I recollect a few seasons ago seeing a case of stuffed Starlings in the possession of the late Mr. J. T. Turner; it contained four birds, one *white*, one *pied*, one *black*, and one of the normal type, and, if I remember correctly, all were killed in different parts of the New Forest. In 1874 I saw a peculiarly marked specimen which had been killed near here. Its head and neck were of an uniform pale yellowish gray, whilst the rest of the body was of the usual colour and markings, except the legs, which were much lighter. I do not know if this specimen was preserved, but I believe not. It may be recollected that in the volume of 'The Zoologist' for 1875 (2nd ser. 4692) I mentioned the fact that most of the pied Blackbirds I had seen had more white about the head than upon any other part of the body, and this observation was confirmed by Mr. Gurney (Zool. 2nd ser. 4869). Recently, however, I have seen two specimens which proved the rule by forming the exception. One of these had a white tail, and a few pale feathers upon its back, and, as far as I know, is still alive, not far from the forest, where I have seen it once or twice in my rambles. The other specimen was killed by a boy with a stone, at Mudeford, near Christchurch, on the 16th of September. He had seen it many times bathing on the sea-shore, and although sought after by several persons for a week or two previously, it escaped till the date I have named. This specimen had the upper part of the back, wing coverts, and a band across the belly white, giving it almost the appearance of having a white belt round the body. There were a few pale feathers about the neck, and at the base of the tail, but very little white about the head.—G. B. CORBIN.

ORNITHOLOGICAL NOTES FROM THE ISLE OF WIGHT.—On the 19th of September both Swallows and Martins, mostly immature birds, were observed to be congregating in considerable numbers, seemingly about to migrate. By the 20th of October there was a general move, and few were to be seen after the 25th, and none after the 4th of November. I have been informed by Mr. Careless, naturalist, of Sea View, that he has had a handsome male Roughlegged Buzzard sent him for preservation, which was captured on the 13th of October, at Pelham Lodge, Ryde. It entered by an open window, and was found to be in poor condition; it had sustained an injury in the leg, and died the following day. Length, twenty-two inches; extent of wings, forty-eight inches. Mr. Smith, writing on the 8th November, tells me that he has had seven Short-eared Owls brought to him in a fortnight, and that he usually gets some at the autumnal migration. Few Kestrels remain with us during the winter, but one was seen on the 25th of October, in a six mile walk on the Downs. In reply to the editorial queries (Zool. 2nd ser. 5160) as to when, where, and by whom a specimen of the Spotted Crake I recorded was shot, I am now informed that the bird was found on the 14th September beneath the telegraph-wires on the Cowes and Newport Railway, having, apparently, in its flight, come in contact with them; showing that, like many other species, it is nocturnal in its migration. Not being very rare, I merely noted its occurrence.—HENRY HADFIELD (Ventnor, Isle of Wight).

DARTFORD WARBLER IN CORNWALL.—In Mr. Rodd's "List of the Birds of Cornwall" (Zool. 2nd ser. 2231) the Dartford Warbler is included as a rare species, with the statement that "no very satisfactory record exists of the capture of this small Warbler westward, although it has been seen in some furzy ground in the parish of Madron." Ornithologists, therefore, will be interested to hear that in the neighbourhood of Constantine, where I reside, this bird has been gradually becoming plentiful. I noticed the first I had ever seen here about three years ago, since which time I have observed them frequently amongst furze. They flit from bush to bush, and on alighting disappear immediately, very similarly to the Lesser Whitethroat.—John Tyacke (Constantine, Cornwall).

Distribution of the Green Woodpecker in Cornwall.—In the eastern woodlands this bird is common, but in West Cornwall is very rare (*c.f.* Rodd, Zool. 2nd ser. 2239). In the neighbourhood of Constantine it was at one time very seldom seen, but of late has become more numerous.—Id.

Tree Sparrow Nesting in Middlesex.—In the last published part of the new edition of 'Yarrell's British Birds' (part 10, p. 85) a dozen counties in England are named in which the Tree Sparrow seems not yet to have been recorded as breeding, and one of these is Middlesex. On reference to an interleaved copy of my 'Birds of Middlesex' I find a MS. note, given me by the late Mr. Blyth, to the effect that in June, 1871, he obtained three half-fledged Tree Sparrows, which were taken from a nest in a hole of a tree at Hampstead. This is the only instance which has come to my knowledge of the Tree Sparrow breeding in the metropolitan county.—J. E. Harting.

Honey Buzzard in Suffolk.—On the 25th of September, on my uncle's property at Darsham, in this county, I shot a very fine, though immature, male Honey Buzzard. Expanse of wings four feet, and two feet from beak to tail; contents of stomach, wasp-grubs.—Arthur J. Clark-Kennedy (Little Glemham, Suffolk).

Reappearance of Pallas's Sand Grouse in Ireland.—A fine male specimen of this Sand Grouse was shot on the 4th of October, near Kilcock, in the County Kildare, and its companion, a female, secured at the same time. They were found feeding in a stubble-field, and, at first, were mistaken for Partridges. We have received one for preservation, the other was sent to Messrs. Ashmead and Argent, of Bishopsgate Street, London.—Williams & Son, taxidermists (2, Dame Street, Dublin).

[This fact has already been recorded in 'The Field' of 21st October, 1876, by Mr. Coates, one of the two gentlemen who procured the birds in question. It is not the first instance of the occurrence of this Sand Grouse in Ireland. In 1863, in which year a most extraordinary immigration of these singular birds took place, specimens were procured at Ross (Lord Clermont, Zool. 1863, p. 8934), Drumbeg (Sinclair, 'The Field,' 20th and 27th June, 1863), and Naran (M. B. Cox, 'The Field,' 18th July, 1863), the last-named being the most westerly locality for the species recorded with precision.—Ed.]

Variety of the Common Snipe.—A very interesting specimen has been sent to us for preservation. It is about the size of the so-called

Sabine's Snipe, but not so dark in colour; the dark bars across the breast are well marked, and are continued down to the vent. The tail contained only eleven feathers, but some may have been shot away.—WILLIAMS & SON.

[If we understand Messrs. Williams correctly, the specimen in question may be said to be intermediate in form and colour between the Common Snipe and the so-called Sabine's Snipe. If so, we should much like to see it.—ED.]

GOLDEN EAGLE NEAR KILLARNEY.—So seldom is this noble species now seen at Killarney, that it is not without regret I have to record the capture of a fine female bird, apparently in the second year's plumage, which was shot while flying over the Earl of Kenmare's deer park, about the middle of November last, by Denis Healy, one of the gamekeepers. The bird is now in the hands of Mr. Williams, the well-known taxidermist, in Dame Street, Dublin. The Golden Eagle (*Aquila chrysaëtus*) though commonly supposed to be no longer indigenous to Killarney, is yet not unfrequently observed in the mountainous parts of Kerry; and as I myself have, on more than one occasion, seen the bird hunting along the mountain sides, which border on the lakes, early in the spring, I believe there is good reason to suppose that the Golden Eagle still breeds in some of the less frequented parts of the district.—ARTHUR H. BOWLES (99, Lower Mount Street, Dublin).

GOLDEN EAGLE, ROUGH-LEGGED BUZZARD, &C., NEAR WOODBRIDGE.—During November and December, 1876, a beautiful specimen of the young of the Golden Eagle (*Aquila chrysaëtus*) was taken, together with eight specimens of the Rough-legged Buzzard (*Buteo lagopus*), in the neighbourhood of Woodbridge, Suffolk. On the 14th of December a beautiful male Merlin (*Falco æsalon*) was shot on the ooze skirting the banks of the Woodbridge river. On the 18th of December a female, from the same place, was obtained; and on the 19th of December a second female was shot near the same spot. A Hobby (*Falco subbuteo*) I watched for several minutes, after having first disturbed him from trees, perched on a gate-post abutting on stubble upon which a large flock of Linnets were feeding.—CHARLES MOOR (Great Bealings, Woodbridge, Suffolk).

A PURE WHITE JAY.—On the 20th of October, Mr. Ripley, the bird-stuffer here, showed me a young Jay, pure white, which had been shot within a few miles of York, a few days before. He had another of the ordinary colour, which was out of the same nest. The former had not a single coloured feather about it, but the whole of the plumage was of a uniform pure white. The legs of this bird were also of a whitish colour, as well as the bill; the iris, too, was of a very light colour, in fact almost white. Albinos of this species, I believe, are rare.—R. M. CHRISTY (York).

PHEASANTS IN NEW ZEALAND.—It would seem that pheasants are now fairly established in Southern New Zealand, and are tolerably numerous.

Mr. Alfred Eccles, a former Vice-President of the Otago Acclimatisation Society, has obligingly communicated an extract from the 'Otago Daily Times,' wherein a special correspondent, writing on this subject, remarks as follows:—"In riding near Popotunoa Bush recently, in company with a friend of mine—a resident at Popotunoa—we flushed two pheasants, a cock and a hen. On expressing my surprise and delight, he informed me that there were plenty more there, and that along the Kuriwao Hills (Mr. Roberts's) and up the Waiwera Gorge, and all along that range by Kaihiku Bush, and Warepa, down to South Molyneux, and for miles back, pheasants were to be found in great abundance. This is good news for sportsmen, as from the nature of the country they can never be exterminated by fair shooting, and will afford sport quite equal, if not superior, to black game shooting in Scotland. Mr. Campbell, of Glenfalloch, tells me that there is a solitary hare frequently seen about his place, both by himself and others who know a hare when they see one. It is a great puzzle where poor puss could have come from; she must have either swum the Molyneux or crossed by Balclutha bridge. I hear the rabbits are spreading very rapidly in Southland, and threaten to be a fearful curse; they are now almost, if not quite, up to the Mataura in large quantities."

Blue Shark off Plymouth.—In September last a very beautiful Blue Shark (*Squalus glaucus*) was captured off Plymouth. Its length was fully eight feet, and its colour exceedingly fine. This specimen, I am sorry to say, was not preserved, but I managed to secure some of its teeth, which are finely serrated.—John Gatcombe (8, Lower Durnford Street, Stonehouse, Plymouth).

[This Shark is said to be not common during the Pilchard season off the Cornish coast.—Ed.]

Occurrence of the Fox Shark off Teignmouth.—Being in Taunton one day towards the end of November, I noticed in the Corn Market a small tent erected, with a notice, written in large characters, "Strange Fish," pinned on the outside. A worthy tar, who had charge of the exhibition, assured me I should see a most extraordinary monster of the deep, which no man had ever seen before, and which no one could name. I paid the modest sum of one penny for entrance, expecting to see a dogfish or a porpoise, but found instead a remarkably fine specimen of the Fox Shark, or Thresher (*Alopes vulpes*), which measured about seven feet from the head to the end of the elongated tail. The fisherman told me that this Shark had become entangled in their herring nets, about two miles to the west of Teignmouth, and had been secured after a desperate struggle. It was very fairly stuffed, and had already been exhibited at Exeter and other towns, and no doubt will be found a more remunerative take than many good hauls of herrings.—Murray A. Mathew (Bishop's Lydeard, Taunton).

[The Fox Shark, or Thresher, although occasionally met with in various parts of the coast, is by no means plentiful. It derives its English name of "Thresher" from its supposed habit of attacking and striking the Grampus with its long fox-like tail.—ED.]

OCCURRENCE OF THE BONITO AT PLYMOUTH.—In September last a specimen of the Bonito (*Scomber pelamys*) was caught in a trammel-net in the Cattewater, Plymouth. I examined the fish, and found its length to be one foot eight inches and a half; pectoral-fin, six inches—much longer in proportion to the length of the specimen than shown by Mr. Couch in his figure of this species. Another about the same size, but with the pectoral-fins still longer, was taken some years previously near Plymouth. Yet they did not equal those of a closely-allied species, the Germon or Long-finned Tunny (*Scomber alatunga*), which I at first thought it might be.—JOHN GATCOMBE.

[The Bonito of the tropics, so well known to navigators, is rarely seen in British waters, although, according to the late Mr. Couch, a few specimens have been taken from time to time on the Cornish coast. The colour of the fish is a fine steel-blue, darker on the back, the sides dusky. and whitish below; behind the pectoral-fin is a bright triangular section of the surface, from which four dark longitudinal lines extend backwards to the tail. The specimen above noticed is not a very large one, the species sometimes attaining a length of two feet six inches.—ED.]

LARGE TUNNY ON THE COAST OF NORFOLK.—Early on the morning of the 24th of November, 1876, a large Tunny (*Thynnus vulgaris*), exhausted, but not quite dead, came ashore at Bacton, on the Norfolk coast, where I saw it on the following day, and took the following measurements:—Total length from the point of the upper jaw to the centre of the tail, 7 feet 4 inches: length of first dorsal-fin, in inches, 10·8; of second dorsal, 15·5; of pectoral, 15·8; of ventral, 10·3; of abdominal, 14·2: breadth of tail from point to point, 33·4. The finlets, which were ten in number on the back and nine on the abdomen, were rather less than an inch in depth; the lateral prominences above the tail were about two inches wide; the ridge on the side of the body, in a line with the upper ray of the pectoral fin, projected about a quarter of an inch, and was 18·7 inches long; from the gape to the point of the upper jaw measured 8 inches, and the eye was 2·1 inches in diameter, with a silvery green iris and a very dark blue pupil. The teeth were very small, and the upper jaw projected slightly beyond the lower, which is the reverse of what is stated by Yarrell and Couch. Both the upper and lower jaws were pink, this colour reaching backwards for about two inches from the extremity of the jaws. The general colour of the upper parts of the fish was nearly black, of the sides silvery gray, and of the lower parts, and also of the gill-coverts, silvery white. The first dorsal fin was purplish black, the second dorsal pale pink, shaded in places with dark purplish, the pectoral fin resembled the first dorsal, except that it had a white tip and the under side of the rays was also white, but tinged with pink; the ventral fin was like the pectorals, but without the white tip. The abdominal fin and the finlets were pinkish white; the tail was dark, resembling the first dorsal fin.—J. H. GURNEY (Northrepps, Norfolk).

BREEDING SEASON OF CRAYFISH.—As a note towards determining the breeding time of Sea Crayfish, I mention that I have to-day (Oct. 27, 1876) received one with the berry fully developed.—THOMAS CORNISH (Penzance).

PROCEEDINGS OF SCIENTIFIC SOCIETIES.

LINNEAN SOCIETY OF LONDON.

November 2, 1876.—Prof. ALLMAN, President, in the chair.

Mr. Duppa Crotch exhibited a live specimen of the Norwegian Lemming, with charts showing the nature of the ground traversed in two instances in which he himself had witnessed the westerly migration of this singular little rodent.

Mr. G. Bentham read a paper on the distribution of the Monocotyledonous order into primary groups, more especially in reference to the Australian flora, with notes on some points of terminology.

Dr. Francis Day drew attention to examinations he had made on some Irish Sticklebacks (*Gasterostei*). Abnormal variations in the presence and absence of ventral fin and spines in specimens of the Three-spined and Ten-spined Sticklebacks induce him to consider these appendages of doubtful specific value.

Mr. H. W. Bates communicated a paper by Mr. D. Sharp on the respiratory function of the Carnivorous Water Beetles (*Dytiscidæ*). Experiments made by the author on numerous species show that there are wide differences in the length of time they spend submerged and on the surface for breathing purposes. Most specimens of the group are more active by night than by day.

Prof. Dickie gave a supplementary notice of Marine Algæ obtained in the 'Challenger' Expedition. Of some fifty species one only is new.

A description of *Thaumantis pseudaliris* and *Amesia pexifascia*, two new Lepidopterous forms from Malacca, by Mr. A. G. Butler, was taken as read.

The same author also had a communication on the genus *Euptychia*, a revision, with the addition of twelve new species being made. A case of these butterflies was exhibited in illustration of his paper.

A second communication, by Mr. D. Sharp, referred to new species of Beetles (*Scarabæidæ*) from Central America. These had been captured by Mr. Belt, chiefly in the neighbourhood of Chontales.

Mr. A. Peckover exhibited and made a few remarks on two skins of the young of the Madagascar insectivore, *Hemicentetes nigriceps*, Günth., and on a series of insects from the same island, collected by Mr. A. Kingdon, near Antananarivo.

Mr. E. D. Crespigny showed a specimen of the Umbelliferous plant, *Tordylium maximum*, Linn., obtained near Tilbury Fort, a locality where it had disappeared for a considerable length of time.

November 16, 1876.—Prof. ALLMAN, President, in the chair.

Messrs. J. C. Oman, R. H. Peck, and D. G. Rutherford were duly elected Fellows.

Mr. H. N. Moseley, of H.M.S. 'Challenger,' read a paper on the Flora of Marion Island. This island possesses considerable interest from its isolation and being within the Antarctic drift. It is about 1000 miles from the African continent, 450 from the Crozets, 1200 from the desolate Kerguelen Island, above 2000 from Tristan D'Acunha, and 4500 from the Falklands, to which, nevertheless, its Flora appears related. It is of volcanic origin and snowclad. The rocks at half-tide are covered with *Darvilea utilis*, above high tide *Tillæa moschata* is found in abundance, and beyond the beach a swampy peaty soil covers the rocks, where there is a thick growth of herbage; this is principally composed of species of *Acæna*, *Azorella*, and *Festuca*, the first of these three being the most abundant plant on the island, though the latter grass is by no means scarce. The cabbage-like plant, *Pringlea antiscorbutica*, is less profuse than at Kerguelen's Land. Some of the Ranunculus group are met with at water-pools near the sea; four kinds of Ferns were obtained, *Lomaria alpina* being the most numerous. Lichens are scarce, but Mosses in plenty form yellow patches, which stand out conspicuously midst the green vegetation, which rises to an altitude of probably 2000 feet. From the occurrence of *Pringlea* on Marion Island, the Crozets, and Kerguelen Island, and the existence of fossil tree-trunks on the two latter, the author surmises an ancient land-connection between them.

Mr. Moseley exhibited some insular floral collections in illustration of his paper and of the various parts touched at by the 'Challenger.' He also called attention to a series of volumes and pamphlets on Natural History obtained by him in Japan.

A memoir on the birds collected by Prof. Steere (Michigan, U.S.) in the Philippine Archipelago was read by Mr. R. Bowdler Sharpe, and numerous coloured drawings of the new and rare forms were exhibited and commented on. Although it is but lately that Lord Tweeddale's remarkable monograph on the Philippine birds was published, with immense additions to the Avifauna, yet Prof. Steere's collection has yielded over sixty hitherto unknown species. Many novelties may therefore still be expected as further exploration proceeds. The recorded species of birds from the Philippines at present amount to 285.

A letter containing observations on the American Grasshopper (*Caloptenus femur-rubrum*), with remarks on the same, by Mr. F. Smith, was noticed.

December 7, 1876.—G. Bentham, Esq., Vice-President, in the chair.

Thirteen new Fellows were balloted for, and duly elected.

The botanical papers read were "New British Lichens," by the Rev. W. A. Leighton, and "A General Systematic Arrangement of of the *Iridaceæ* (the Iris family)," by J. G. Baker, of Kew.

Dr. Francis Day read a paper "On the Geographical Distribution of the Fresh-Water Fishes of India." He says that out of nine families of Spiny-rayed Fish (Acanthopterygians) only two are likewise found in the African region; but one of these is in Madagascar, therefore doubtfully African, the other is also found in the Malay Archipelago, which possesses representatives of eight out of nine families. The fresh-water fishes of Ceylon, the Andamans and Nicobars, he believes, are strictly Indian, while, as these fishes cannot be spread except by line of fresh-water communication, it thus appears highly probable that these islands were at one time connected with the Continent of India. Moreover, certain forms exist in Malabar which are absent from the rest of India, but reappear in the region of Chittagong or Siam. The evidence derived from his data shows that the Fauna of Hindostan preponderates towards the Malayan, and not African, region, as many aver.

Mr. Christy exhibited and made remarks on specimens of the so-called Black Coral (*Antipathes*) from the Philippines.

Zoological Society of London.

November 7, 1876.—Prof. Newton, F.R.S., Vice-President, in the chair.

The Secretary read a report on the additions that had been made to the Society's Menagerie during the months of June, July, August and September, 1876.

A letter was read from Dr. Otto Finsch relating to the supposed existence of the Wild Camel (*Camelus bactrianus*) in Central Asia.

A letter was read from Mr. E. Pierson Ramsay, giving a description of the habits of some *Ceratodi* living in the Australian Museum, Sydney, which he had lately received from Queensland.

Mr. W. K. Parker read a memoir on the structure and development of the skull in the Sharks and Rays.

Prof. A. Newton made a correction of some of the statements in Canon Tristram's "Note on the Discovery of the Roebuck in Palestine" (Proc. Zool. Soc., 1876, page 421).

Lieut.-Colonel Beddome gave the description of a new species of Indian Snake from Manantawaddy in the Wynaad Hills, which he proposed to name *Platyplecturus Hewstoni.*

Dr. G. E. Dobson communicated a monograph of the Bats of the group *Molossi.*

Dr. A. Günther read a report on some of the recent additions to the Collection of Mammalia in the British Museum, amongst the most remarkable of which was a new form of Porcupine, from Borneo, proposed to be called *Trichys lipura;* and a new Marmozet, obtained by Mr. T. K. Salmon, near Medellin, U.S. of Columbia, to which the name *Hapale leucopus* was given.

November 21, 1876.—Prof. FLOWER, F.R.S., Vice-President, in the chair.

The Secretary read a report on the additions that had been made to the Society's Menagerie during the month of October.

Mr. Sclater exhibited and made remarks on the skin of a young Rhinoceros (*R. sondaicus*), belonging to Mr. W. Jamrach, which had been captured in the Sunderbunds, near Calcutta, in May last.

The Secretary exhibited, on behalf of Mr. Andrew Anderson, a coloured drawing of a specimen of *Emys Hamiltoni*, lately captured at Futtehgurh (Ganges). The occurrence of this *Emys*, chiefly confined to Lower Bengal, so far west as Futtehgurh, was considered as of much interest.

A letter was read from Count T. Salvadori, containing remarks on some of the birds mentioned by Signor D'Albertis, as seen by him during his first excursion up the Fly River.

A communication was read from Mr. G. B. Sowerby, jun., containing descriptions of six new species of shells, from the collections of the Marchioness Paulucci and Dr. Prevost.

Mr. Edward R. Alston read a paper containing the descriptions of two new species of *Hesperomys* from Central America, which he proposed to call respectively *Hesperomys teguina* and *H. Couesi.*

A paper was read by Professor Garrod on the Chinese Deer, named *Lophotragus michianus*, by Mr. Swinhoe, in which he contended that the species so called was identical with *Elaphodus cephalophus* (A. Milne-Edwards), obtained by Père David in Moupin. He pointed out the close affinity between the genera *Elaphodus* and *Cervulus,* the latter differing little more than in the possession of frontal cutaneous glands not found in the former.

Mr. Arthur G. Butler read a paper containing descriptions of new species of Lepidoptera from New Guinea, with a notice of a new genus.

A communication was read from Dr. J. S. Bowerbank, being the eighth of his series of "Contributions to a General History of the *Spongiadæ.*"

December 5, 1876.—Dr. E. Hamilton, Vice-President, in the chair.

The Secretary read a report on the additions that had been made to the Society's Menagerie during the month of November, and called particular attention to four Brazilian Cormorants (*Phalacrocorax brasilianus*), purchased, and a Hooded Crane (*Grus monachus*), received on deposit.

A letter was read from Count T. Salvadori, announcing that a new species of Paradise-bird of the genus *Drepanornis*, had been discovered near the most inland point of Geelvink Bay, New Guinea.

A communication was read from Mr. Andrew Anderson, containing some corrections of and additions to previous papers on the "Raptorial Birds of North-Western India."

Mr. Francis Day read a paper on the fishes collected by the Yarkand Mission, in 1873, to which the late Dr. Stoliczka was attached as naturalist. The paper gave an outline sketch of the Fresh-water Fishes of Hindostan, Afghanistan, Western Turkestan, Yarkand, Tibet, and Cashmere. The author showed that the principal fishes of Yarkand belong to a local group of Carps, termed "Hill Barbels, or *Schizothoracinæ*," by M'Clelland; that this group is almost restricted to cold and elevated regions, spreading to the most eastern portion of Western Turkestan, Afghanistan, and along the slopes of the Himalayas to China; and that these forms are entirely distinct from the Carps of the plains to the south of the Himalayas.

A communication was read from Mr. Martin Jacoby, giving descriptions of new genera and species of phytophagous Coleoptera.

A communication was read from Dr. A. Günther, containing the description of a new species of Lizard from Asia Minor, which he proposed to name *Zootoca Danfordi*, after Mr. C. G. Danford, its discoverer.

Dr. Günther communicated a paper by Mr. W. Ferguson, of Colombo, containing the description of a new species of Snake of the genus *Aspidura* from Ceylon, for which the name of *A. Guentheri* was proposed.—*P. L. Sclater.*

Entomological Society of London.

November 1, 1876.—Professor Westwood, M.A., President, in the chair.

Additions to the Library.

The following donations were announced, and thanks voted to the donors:—'Proceedings of the Zoological Society,' 1876, parts ii. and iii.; by the Society. 'The Zoologist' and 'Newman's Entomologist' for November; by the Representatives of the late Edward Newman. 'The Entomologist's Monthly Magazine' for November; by the Editors. 'The Naturalist; Journal of the West Riding Consolidated Naturalists' Society,' no. xvi.; by the Editor. 'Nature,' nos. 362—365; by the Publishers.

'L'Abeille,' nos. 180 and 181; by the Editor, M. S. A. de Marseul. 'Iconographie de Chenilles et Lepidoptères inedits,' par E. Millière, tom. iii., part 35 (concluding the work); by J. W. Dunning. 'Catalogo della Collezione di Insetti Italiani del R. Museo di Firenze,' serie 1a, Coleotteri; 'Bulletino della Societa Entomologica Italiana,' anno ottavo, trimestre iii.; by the Society. 'Horæ Societatis Entomologicæ Rossicæ,' t. xi., nos. 2, 3 and 4; by the Entomological Society of Russia. 'The American Naturalist,' vol. x., nos. 9 and 10; by the Editor. 'Transactions of the Academy of Science of St. Louis,' vol. iii., nos. 1—3; by the Society.

Exhibitions, &c.

Mr. F. Smith exhibited some remarkable specimens of thorns from Natal and Brazil, which had been taken possession of by certain species of Cryptoceridæ for the construction of their formicaria: some of them were as much as three inches in length.

Mr. Champion exhibited a bug sent by Mr. Walker from Besika Bay. It was figured in Guerin's Mag. de Zool. under the name of Mustha spinosula.

Professor Westwood mentioned that a caterpillar had been forwarded to him from Deal, the captor complaining that he had suffered from considerable irritation of the skin, caused by the hairs of the insect, and that the irritation had continued for a week afterwards. It was the larva of Lasiocampa rubi.

The Professor exhibited a singular Coleopterous larva, from Zanzibar, of a flattened, ovate form and a steel-blue colour, with two points at the extremity of the body and with long clavate antennæ: the head bore some resemblance to that of the Dipterous genus Diopsis. He also exhibited a specimen of the butterfly Hesperia Sylvanus, received from the Rev. Mr. Higgins, of Liverpool, having the pollinaria, apparently of an orchid, attached to the base of the tongue. Also the bulb of an orchid, purchased by Mr. Hewitson with a collection of roots from Ecuador, which was found to contain nine living specimens of cockroaches, comprising six different species, *viz.*, Blatta orientalis, Americana, cinerea, Maderæ, and two others unknown to him, some being of considerable size.

Professor Westwood alluded to the varied nature of the collection recently exhibited at the "Exposition des Insectes utiles et des Insectes nuisibles," in Paris, and remarked on the absence in the list of exhibitors of the names of many distinguished French entomologists.

Mr. Dunning read the following:—

Note on Acentropus.

"In the Transactions of the Entomological Society of the Netherlands for the present year (Tijd. v. Entom. xix. 1), Heer Ritsema has published a Second Supplement to his 'Historical Review of the genus Acentropus;' and the author, writing in June, 1875, prefaces it with the welcome announcement that he has worked up the literature to the present time, 'as in all probability I shall be able in this summer to complete the history of the mode of life and the different stages of A. niveus.'

"Whether this expectation has been fulfilled, either in 1875 or 1876, I do not know. But, however this may be, I am sure Heer Ritsema will be glad to learn that, though he and I failed to convince Newman that the genus is properly placed in the Lepidoptera, we did make a convert of Doubleday. In a Supplement to his 'Synonymic List of British Lepidoptera,' published in 1873, Doubleday for the first time admitted Acentropus into that order. Its precise place in the order is not indicated, but it is immediately followed in the Supplement by a species of Ebulea (Botydæ), which sufficiently shows that the position which Doubleday would assign to Acentropus is in or near the Hydrocampidæ.

"It may possibly be remembered that, in a paper which the Society did me the honour to publish in the 'Transactions' for 1872 (pp. 121 and 281), I adduced some arguments tending to show that there is really one species, and one only, of this genus; and in a note on p. 156, the position is thus summed up;—'I am quite in accord with Ritsema when he says that A. Hansoni, Garnonsii, Nevæ, badensis and germanicus are not specifically distinct from A. niveus; but I go a step further, and say that A. latipennis is identical with A. Hansoni.' Ritsema is now satisfied that A. latipennis is identical with A. Hansoni, but still thinks that there are two species, of which one (A. niveus, *Oliv.* = A. Garnonsii, *Curt.*) has a female with rudimentary wings, and the other (A. latipennis, *Möschl.* = Zancle Hansoni, *Ste.*) has a female with normally developed wings. Doubleday, in the Supplementary Catalogue already mentioned, does not go into the synonymy at length, but records one species only, under the name of A. niveus, giving latipennis as a variety, thus:—

ACENTROPUS NIVEUS. *Niveus*, Olivier?
latipennis, Möschl., *var.*

"I am not able to throw any further light on the specific identity or distinctness of the two forms. Ritsema, however, refers to his having found many specimens, all males, at Arnheim, and to the capture at Huissen (near Arnheim) of a winged female, which he recognises as A. latipennis. 'By this capture' (says he, at p. 15), 'I am fortified afresh in the opinion that there are *two* species. . . . . For it would be otherwise inexplicable that amongst the innumerable winged individuals captured by me at Overween, not a single female occurred, and that I, by *breeding* from larvæ coming from the same place, obtained only females (in number already amounting to fifteen), which were furnished with wing-rudiments and live in the water, whilst the first specimen that is *captured* at Huissen, inside the house at a lamp, is a female with well developed wings.' I must confess that I cannot follow this reasoning. Be it remembered that no difference is suggested in the males from the different localities, and the supposed distinctness of the species rests entirely on the possession by the females in the one case of developed and in the other of rudimentary wings. From Arnheim and Huissen, males, and one winged female captured; from Overween, males, and fifteen unwinged females bred. *Ergo,* two species! Surely this is a *non sequitur*. It is, in fact, a repetition of Brown's argument (with which I dealt in the 'Transactions' for 1872, p. 142), that the winged female occurs in one locality, and the apterous females in another locality. I can scarcely see how the facts mentioned by Ritsema can be said to fortify any opinion one way or the other. So far from proving the duality, they are quite consistent with the unity of the species. And recalling the facts that Curtis and Dale took both forms of female at Glanville's Wootton, that Brown bred the apterous and McLachlan captured the winged form at Burton, and lastly that Ritsema himself, in 1870, found pupæ at Haarlem from which two females emerged, of which one had rudimentary and the other well-developed wings, I venture to hazard a conjecture, that if Ritsema perseveres with his breeding from Overween larvæ, he will obtain some females with wings as ample as those which flew to the lamp at Huissen.

"In conclusion, one word of regret, a tribute to Members this Society has lost. In the short period since the publication of my former paper on Acentropus, of those to whom I then referred as living authors, death has removed no less than three—Henry Doubleday, Edward Newman and Edwin Brown."—*F. G.*

NOTICES OF NEW BOOKS.

A History of British Birds. By the late WILLIAM YARRELL, V.-P.L.S., F.Z.S. Fourth Edition. Revised by ALFRED NEWTON, M.A., F.R.S., Professor of Zoology and Comparative Anatomy in the University of Cambridge. Part 10, Nov. 1876. Van Voorst, Paternoster Row.

WE note with satisfaction the appearance of another part of the new edition of this standard work, the issue of which is steadily, although, we regret to say, slowly progressing. In some measure, no doubt, the advancement of the work has been retarded by reason of the great labour entailed in satisfactorily working out the small passerine birds, especially in the case of such difficult groups as the Wagtails, Pipits, and Linnets, where a nice discrimination of species and a careful comparison of authorities on the subject of geographical distribution has obviously necessitated a vast expenditure of time and trouble. Now that the Editor has almost completed this troublesome portion of the work, we may hopefully look for a more rapid issue of succeeding parts.

On glancing through the number before us, we find that much new matter has been introduced, even in the case of very common species. It would scarcely have been supposed that so universally distributed a bird as the common House Sparrow could be anywhere unknown in England, and yet we find the observation (at p. 94, note) that Mr. Rowe states that at Shepstor, a moorland village in Devon, the Sparrow is never seen. The Editor adds that this is the sole exception to its universal distribution in England known to him.

Throughout the whole of the palæarctic region this ubiquitous bird has been found, penetrating Siberia, and extending its range across the Asiatic continent as far northward as lat. 61° N., and as far to the east as the confluence of the Shilka and Argun. If the Sparrow of India be not a distinct species, as we believe it is not, we may trace our old friend from Yarkand to Siam and Ceylon. Unable, apparently, to thrive anywhere away from human habitation, "it keeps extending its area as desert countries are settled by man, being dependent on him for its living." "Thus," says Professor Newton, "the questions are opened whether it should not be regarded as a parasite throughout the greater part of its present range, and what should be deemed its native country. These are points which seem never to have been discussed, but for all that are none the less worthy of consideration."

The Hawfinch, so long described by ornithologists as an accidental visitor, is now known to inhabit various parts of England in considerable numbers, and is believed to be increasing year by year (p. 98). The seed of the hornbeam is said to be a favourite morsel with this bird, "but it also feeds on the kernels of haws, laurels, plums and other stone-fruits, and in summer makes great havock amongst green pease" (p. 99).

The Serin Finch, not mentioned in previous editions of the present work, is now included and figured; the increased attention bestowed on Ornithology having resulted in its detection in various parts of the South of England.

The remarks on the nesting of the Siskin deserve careful perusal, and various interesting notes on the local names of birds and their derivation, which are scattered throughout this number, cannot fail to be acceptable to ornithologists.

The Birds of Marlborough. By EVERARD F. IM THURN. Appendix, pp. 10, demy 8vo. Perkins & Son, Marlborough. 1876.

ON taking up this pamphlet, the first thing that strikes us is the obvious inconvenience which results from publishing an Appendix in a larger form than the volume which it is intended to supplement, the original publication being a small post and the present addition a demy octavo. The two consequently cannot be bound together. Saving this objection, the new pages bear testimony to the interest which is taken in one at least of our public schools in the subject of Natural History, and to the progress which is being made in a particular branch of it.

We are glad to see that the objections which we pointed out to the systematic arrangement adopted by Mr. Im Thurn in his earlier production have since received his consideration and concurrence, and that he now admits the inconvenience which has been found to arise from it. He says:—

> "I now think that the plan is useless, and only serves to confuse the reader. If it is adopted in a history of the birds of a district, it should at least be accompanied by a synoptic list of the whole of the birds in their proper order. I now hold this view so strongly that I take the present opportunity to give such a list, in which will be found the names of all the birds which we know to have occurred within a district extending for eight miles round Marlborough."

The reasons for fixing this limit will be found in the preface to the earlier publication.

The new species which have been added to the list since 1870 are the Hen Harrier, Whimbrel, Spotted Crake, Pintailed Duck, Scaup, Common Scoter, Shag and Little Gull, almost all of which are inserted on the strength of a single occurrence, while the majority of them can only be regarded as purely accidental visitants to the district.

We have not space to criticise the list in detail, but we may observe that some of the author's corrections of former statements are not improvements. For example, the Hobby, formerly regarded as an occasional visitor, is now marked as "a resident, though a scarce one," whereas it would have been more accurately described as a summer migrant. The Merlin has been transferred from the occasional visitors to the residents, while there can be no doubt that, as regards the South of England, its place is amongst the winter visitants.

Notwithstanding the new paragraph from the 'Marlborough Times' anent the Curlew nesting on Aldbourne Downs, we are still sceptical on the subject, and cannot doubt that the species referred to is the Stone Curlew or Thick-knee. The true Curlew (*Numenius arquata*), in all probability, only occurs on passage.

The Official Report of the Recent Arctic Expedition. By Captain NARES, R.N., Commander of the Expedition. With a Map. 8vo, pp. 96. Murray, London. 1876.

IN an octavo pamphlet of ninety-six pages Captain Nares has given a brief but clear account of all that befell the crews of the 'Alert' and 'Discovery' on their recent Expedition, from the date of their leaving Upernavick in July, 1875, until their arrival home in October, 1876.

Notwithstanding the extreme interest which attaches to this Report, and which, in its handy and accessible form, should be read *in extenso* by everyone, it would be beyond our province to deal with any but the zoological portion of it, and to this therefore we confine attention.

Of course, in a general report such as this is, we do not expect to find the details which are most likely to interest readers of 'The Zoologist,' for these are reserved for publication in the special Report of the Naturalists to the Expedition. At page 47, the Commander of the Expedition, paying a well-deserved compliment to Captain Feilden, says:—

> "I have not hitherto alluded to the services of Capt. Feilden, Paymaster R.A., Naturalist to the Expedition, preferring that the Report on the numerous scientific subjects to which he has directed his attention should

> emanate from himself; I will merely state here that no one moment has been lost by this indefatigable collector and observer. He has, moreover, by his genial and ready help on all occasions, won the friendship of all, and I feel confident that their Lordships will highly appreciate his valuable services. I am only doing him justice when I state that he has been to this Expedition what Sabine was to that under Sir Edward Parry."

This is good news for naturalists, and we look forward with pleasurable expectations to the appearance of Capt. Feilden's own account of his labours.

Meantime, on glancing through the Report before us, we do not fail to notice the occasional allusions which are made to the game and wild-fowl procured *en route* by the officers and crews of both vessels. In the neighbourhood of Hayes Sound the sportsmen discovered a richly vegetated valley, with numerous traces of Musk Oxen and other game (p. 10). Walrus Shoal, off Franklin Pierce Bay, and a mile to the eastward of Norman Lockyer Island, was so named from the numerous remains of Esquimaux found on the island, who, to judge by the number of bones lying about, had evidently subsisted principally on these animals. At present this neighbourhood may be considered as the northern limit of their migration, only a very few having been seen further to the north (p. 16).

> "On entering Discovery Harbour," says Capt. Nares (p. 24), "we had the satisfaction of sighting a herd of nine Musk Oxen, all of which were killed; our joy at the good luck being greatly increased by the news that the vegetation was considerably richer than that of any part of the coast visited by us north of Port Foulke, the Elysium of the Arctic regions."

Here the 'Discovery' made her winter quarters, and the 'Alert' pushed onward alone. The winter quarters of the latter vessel were established off Cape Sheridan, in the highest northern latitude ever yet reached by a ship. Capt. Nares' account of the situation, and of the long arctic winter, with its unparalleled intensity and duration of darkness for one hundred and forty-two days, is engrossing in the extreme.

The vicinity of the winter quarters of the 'Alert' "proved to be unfavoured by game."

> "On our first arrival," says Capt. Nares (p. 48), "a few Ducks were seen and five shot; and during the winter and spring three Hares were

shot in the neighbourhood of the ship. This completes our list up to the end of May. In March a Wolf suddenly made his appearance; and the same day the track of three Musk Oxen or Reindeer were seen within two miles of the ship, but they had evidently only paid us a flying visit.

"In July six Musk Oxen were shot, the only ones seen in our neighbourhood. The travelling parties were only slightly more fortunate in obtaining game.

"In June a few Ptarmigan, Ducks, and Geese were shot, and used by the sick. In July and August they obtained a ration of fresh meat daily.

"In March and the beginning of April about two dozen Ptarmigan passed the ship, flying towards the N.W. in pairs: finding no vegetation uncovered by snow in our neighbourhood, they flew on, seeking better feeding grounds, and were nearly all shot subsequently by the outlying parties near Cape Joseph Henry. In the middle of May, Snow Buntings and Knots arrived. A number of the young of the latter were killed in July, but no nests or eggs were found. Early in June, Ducks and Geese passed, in small flocks of about a dozen, flying towards the N.W., but owing to a heavy fall of snow, lasting three days, which covered the land more completely than at any other time during our stay, at least half the number returned to the southward, not pleased with their prospects so far north.

"Two dozen small Trout were caught during the autumn and summer in lakes from which they could not possibly escape to the sea.

"The total game list for the neighbourhood of the 'Alert's' winter quarters is as follows:—

"In winter quarters—Musk Oxen, 6; Hares, 7; Geese, 67; King Ducks, 12; Longtailed Ducks, 9; Seal, 1; Foxes, 3.

"By short service sledging parties—Hares, 13; Geese, 3; King Ducks, 5; Ptarmigan, 10.

"Total—Musk Oxen, 6; Hares, 20; Geese, 70; King Ducks, 17; Longtailed Ducks, 9; Ptarmigan, 10; Seal, 1; and Foxes, 3."

At the lakes in the neighbourhood of Cape Beechy, on the voyage home (August 4th) a number of Geese were found, all unable to fly; the old ones moulting were nearly all featherless, and the young ones, although well-grown, were yet unfledged. Fifty-seven were captured (p. 77).

The species of Goose is not named, but in all probability it was the Brent. On this, however, as well as on many other points of interest, we shall no doubt be duly enlightened in the forthcoming special Report of the Naturalists to the Expedition.